

Claims

1. A hand tool grinding jig for use in co-operation with grinding apparatus having a rotatable grinding wheel, the jig including in combination:
 - 5 a tool clamp for clamping a tool,
 - a leg pivotally connected about a leg pivotal axis to the clamp and angularly adjustable relative to the clamp, the leg having a pivot point at an end thereof remote from the clamp,
 - a pivot support for location adjacent to the grinding apparatus and having a pivot receiver adapted to receive the pivot point, and
- 10 the pivot support is adjustable so that the position of the pivot receiver may be adjusted relative to the grinding wheel to allow the tool to be provided at a required angle relative to the grinding wheel.
2. A jig as claimed in claim 1 wherein the pivot receiver is disposed so that when a tool is disposed in the tool clamp and the pivot point is disposed in the pivot receiver the leg pivotal axis is further from the grinding wheel than the pivot receiver.
- 15 3. A jig as claimed in claim 1 wherein the pivot receiver is disposed so that when a tool is disposed in the tool clamp and the pivot point is disposed in the pivot receiver the leg pivotal axis is closer to the grinding wheel than the pivot receiver.
- 20 4. A jig as claimed in claim 1 wherein two pivot receivers are provided, each pivot receiver being provided in a plane of the grinding wheel.
- 25 5. A jig as claimed in claim 1 wherein the clamp includes a clamping block which is moveable relative to two intersecting walls to clamp the tool between internal surfaces of the walls and the clamping block.
- 30 6. A jig as claimed in claim 1 wherein the clamp includes a clamping block which is moveable relative to two intersecting walls to clamp the tool between internal surfaces of the walls and the clamping block, and the walls each having an aperture therein to receive a side of the clamping block.
- 35 7. A jig as claimed in claim 1 wherein the clamp includes a clamping block which is moveable relative to two intersecting walls to clamp the tool between internal surfaces of the walls and the clamping block, and the walls each having an aperture therein to receive a side of

the clamping block such that the clamping block may be moved substantially adjacent to the point of intersection between the walls.

8. A jig as claimed in claim 1 wherein the pivot support comprises a first part adapted to be affixed adjacent to the grinding apparatus and a second part which carries the pivot receivers, the second part being adjustably movable relative to the first part.

9. A method of shaping a hand tool comprising the steps of:

clamping the tool in a clamp having a leg pivotally connected about a leg pivotal axis to the clamp and angularly adjustable relative to the clamp, the leg having a pivot point at an end thereof remote from the clamp,

providing a pivot receiver closely associated with a grinding wheel,

adjusting the position of the pivot receiver relative to the grinding wheel to allow the tool to be provided at a required angle relative to the grinding wheel, and

rotating the tool about the pivot point to shape the tool.

10. A method as claimed in claim 9 including the step of adjusting the pivot receiver so that when a tool is disposed in the tool clamp and the pivot point is disposed in the pivot receiver the leg pivotal axis is further from the grinding wheel than the pivot receiver.

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11. A method as claimed in claim 9 including the step of adjusting the pivot receiver so that when a tool is disposed in the tool clamp and the pivot point is disposed in the pivot receiver the leg pivotal axis is closer to the grinding wheel than the pivot receiver.

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12. A method as claimed in claim 10 including the step of moving the tool about the pivot point such that a nose of the tool may be placed in contact with the grinding wheel at a substantially constant angle.

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13. A method as claimed in claim 11 including the step of moving the tool about the pivot point such that a nose of the tool may be placed in contact the grinding wheel and the angle between the grinding wheel and the tool nose decreases as the tool is rotated from the tool nose to a side of the tool.